

Heat Smart!

Homeowners Can Save Money By Conserving Heating Oil

The U.S. Department of Energy, Brookhaven National Laboratory, and the Petroleum Marketers Association of America have joined with your oil heat marketer in an effort to help you, the homeowner, save money and conserve oil. This pamphlet is intended to guide you in selecting methods to achieve these goals.

What Can Be Done?

Now is the time to improve the efficiency of your oil-fired heating system. Many low cost system adjustment options exist that can save you money and conserve oil. These adjustments include: heating system tune-up and heat exchanger cleaning, reduced fuel firing rate, reduced temperature settings of boiler water or furnace circulating air (manual adjustment), pipe and ducting insulation, and, of course, thermostat, set-back, which can save 3% for each degree you lower the setting. The savings for these adjustments can range from 2% to 12% annual fuel use or \$2-\$12 per \$100 of fuel costs. In addition, major equipment upgrades are possible, including installation of a flame-retention head burner (15-20% savings), as well as whole system replacements with the installation of a high efficiency oil fired furnace or boiler (20-40% savings).

Call Your Oil Heat Marketer or Service Technician Today!

They can help you with a tune-up, system adjustments, efficiency rating of your oil-fired home heating system, and system upgrades to enhance efficiency and save you money.

The First Step!

The first step is to tune-up the current heating system and clean it (by brushing and vacuuming the heat exchanger) to maximize its efficiency. The efficiency should be measured using special testing equipment that measures flue gas composition, temperature, smoke level, and chimney draft. The tune-up of the oil-heating system should be left to a well-trained oil heat service technician, whose expertise is required to do the job right. It is not a do-it-yourself conservation activity. The oil heat service technician will be glad to show you how he makes these measurements and will explain the results. He would then be able to discuss options, including possible adjustments or equipment upgrades, aimed at energy conservation and saving you money.

Need More Information?

Call and talk with your oil heat marketer or service technician. They are there to provide you with service, comfort, and savings. Write your local, city, or state energy office for additional information on oil heat energy conservation programs (educational materials, tax incentives, rebates, or low interest loans.) These may not be available in every state. For more information on **Heating Smart**, you can obtain a copy of "Improving the Efficiency of Your Oil Heating System" by calling or writing to the Energy Efficiency & Renewable Energy Clearinghouse (EREC):

EREC
P.O. Box 3048
Merrifield, VA 22116
Phone: 800-DOE-EREC
Fax: 1-703-893-0400
TDD 1-800-273-2957

EREC can also direct you to the Low-Income Weatherization Office in your state to determine if you are eligible for free oil heat conservation services.

EQUIPMENT ADJUSTMENT AND UPGRADE OPTIONS TO IMPROVE EFFICIENCY AND SAVE MONEY

EQUIPMENT ADJUSTMENT	RANGE OF TYPICAL SAVINGS	COMMENTS
Thermostat set-back	3% per degree of set back	For large reductions in temperature, check with your physician (hypo-thermia may be of concern with senior citizens)
Heating system tune-up	2-10%	Savings depend on emphasis placed on other adjustment options
Reduced firing rate or nozzle size reduction	6-10%	Savings depend of current level of over-firing
Reduced temperature of circulating boiler water or furnace air	5-12%	May result in reduced heat delivery and perceived comfort
Pipe and duct insulation	5-10%	Sometimes difficult to do, due to location in the house

SYSTEM UPGRADE	RANGE OF TYPICAL SAVINGS	COMMENTS
Flame retention head burner	15-20%	Check combustion chamber for cracks and damage; repair as needed
New high-efficiency hot water boiler (hydronic) heating system	20-40%	Compare "AFUE" * efficiency ratings
New high-efficiency warm air furnace	20-40%	Compare "AFUE" * efficiency ratings

**In order to provide you with the information to select the best furnace or boiler, the U.S. Government requires every manufacturer to publish an Energy Guide showing the "AFUE" efficiency rating of each model manufactured. Call your local library regarding consumers' directory of certified furnace efficiency ratings (AFUE).*

Developed by Brookhaven National Laboratory
for the
U.S. Department of Energy
Office of Building Technology, State and Community Programs
Reissued April 2000